

ABSTRACT OF THE DISCLOSURE

Product made by separating bone and oil from marine byproducts. The byproducts are ground and warmed to a relatively low temperature of approximately 70 deg.C. or less. The warmed material is passed to a refiner to separate the bone from the meat portions. The meat portion is transferred to a digestion tank where the endogenous enzymes perform a first stage digestion. Exogenous enzymes may be added and further digestion may take place for increased liquefaction of the meat portion. The exogenous enzymes can survive temperatures higher than the 60-65 deg.C. range so the liquified material can be heated during the further digestion to increase hydrolysis and pasteurize the product. Oil may be removed from the product by centrifuge following completion of either digesting step. Evaporation of the product may be used to increase the percentage of solid material. Alternatively, the oil may be removed after digestion without mechanically deboning the byproducts.

specs/uspto/bio41304.wpd

I HEREBY CERTIFY THAT THE ABOVE INVENT AND/OR FILE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE "EXPRESS MAIL POST OFFICE TO ADDRESSEE" SERVICE UNDER 37 C.F.R. 1.10 ON THE DATE INDICATED BELOW AND IS ADDRESSED TO THE COMMISSIONER OF PATENTS AND TRADEMARKS, WASHINGTON, D.C. 20231.

DATE OF DEPOSIT: January 8, 2004

EXPRESS MAIL MAILING NUMBER: 95 243583746US

JOHN R. UREN  
Reg. No. 27,530